TOPFIELD

SBF-5400

User Guide

Digital Satellite Receiver

DVB
Digital Video
Broadcasting

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The lightning flash with arrowhead symbol, in an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to a person.

The exclamation point, in an equilateral triangle, is intended to alert the user to the presence of important operation and maintenance instructions in the literature accompanying the product.

Precautions

- Read, keep and follow these instructions.
- Heed all warnings.
- Clean only with a dry cloth.
- Do not block any of the ventilation openings.
- Do not install near any heat sources or in direct sunlight as this will impair cooling.
- Do not operate this product near water. Do not place any of the objects filled with liquids, such as vases on this unit.
- Do not try to change the plug or defeat its safety purpose. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- This product is designed for indoor use only.
- Place the digital receiver on a firm and level surface.
- Do not lay any objects such as magazines on this unit.
- Do not overload power outlets. Doing so may result in a risk of fire or electrical shock.
- Never open this unit's casing under any circumstances, or the warranty will be void.
- Unplug this unit during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the unit has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the unit, the unit became wet from rain or moisture, does not operate normally, or has been dropped.
- Batteries, including those which contain no heavy metals, may not be disposed with other household wastes. Please dispose of used batteries in an environmentally sound manner. Find out the legal regulations which apply in your area.

About this user guide

Thank you for purchasing our digital receiver. Please read this user guide carefully before you use the digital receiver and keep it handy for future reference.

This User Guide covers the model SBF-5400 .

- Illustrations pictured in this manual may not be exactly the same as the actual product.
- The screenshots used in this manual may not be exactly the same as those you see on the actual on-screen displays.
- Designs and specifications of the digital receiver and other accessories are subject to change without any notice in order to introduce new features or improve the functionality of the product.

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Chapter 1

Introduction

The SBF-5400 digital receiver is fully compliant with the international Digital Video Broadcasting (DVB) standard, and thus is able to receive digital broadcasts of that standard. For its operation you need an antenna, which must be installed appropriately.

NOTE

In general we equate a channel with a frequency. However, unlike analogue broadcasts, digital broadcasts are not all assigned to their own frequencies; instead, multiple television broadcasts are transmitted through a single frequency. The frequency in digital broadcasting is usually called transponder or multiplex. To reduce confusion in this manual, the word **service** is preferably used than **channel** as a term to indicate one television or radio broadcast.

1.1 Features

This digital receiver has the following features:

- Supports DiSEqC 1.0, DiSEqC 1.1, DiSEqC 1.2 and USALS protocols.

- Can store up to 5,000 television and radio services.
- You can edit the services list.
- Can create lists of your favourite services.
- Can view information about the current television or radio programme.
- Has an electronic programme guide that provides an overview of scheduled programmes.

1.2 Controlling the digital receiver

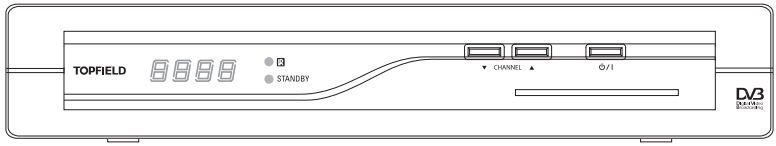
You can operate the digital receiver with the remote control or the buttons on the front panel.

NOTE

When the digital receiver is off but plugged into a wall socket, we say that it is in standby mode; on the other hand, when it is on, it is in active mode. Even when you are not using the digital receiver, you should keep it plugged into a wall socket to be in standby mode so that it can run timer events at any time.

1.2.1 Front panel

The front panel of the digital receiver has buttons to control the digital receiver, specific lights and a display to indicate its status. The following indicates what they mean.



⏻/❙ button switches the digital receiver between standby mode and active mode.

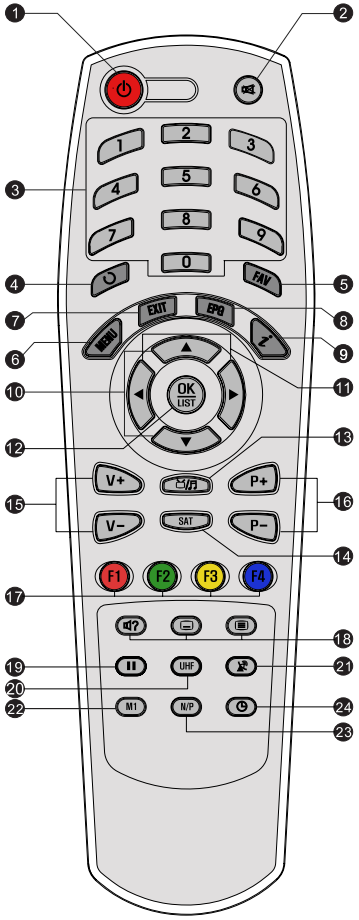
Front display shows the current time in standby mode, and displays the current service in active mode.

STANDBY light lights up while the digital receiver is in standby mode.

light blinks every time you press a button on the remote control.

CHANNEL ▼, ▲ buttons switch to the previous or next service. They are also used to navigate in menus and interactive screens.

1.2.2 Remote control



1 ⏻ button switches the digital receiver between standby mode and active mode.

2 🔇 mutes the sound. Press again to switch it back on.

3 Numeric buttons are used to enter a service number for service change or to specify values for menu options.

4 ↩ switches over between the current service and the previously viewed one.

5 FAV displays the favourite lists.

6 MENU displays the main menu. It is also used to return to the previous menu from a submenu.

7 EXIT is used to exit a menu or to hide on-screen information.

8 EPG displays the electronic programme guide.

9 displays the service information box. It is also used to display more information about a programme.

10 ▼, ▲ switch to the previous or next service. They are also used to navigate in menus and interactive screens.

11 ◀, ▶ decrease or increase the volume. They are also used to change values for menu options.

12 OK displays the services list. See §5.2.1 for more details. It is also used to select a menu item.

13 TV/♫ switches over between television services and radio services.

14 SAT displays the satellites list.

15 V−, V+ buttons decrease or increase the volume. They are also used to change values for menu options.

16 P−, P+ buttons switch to the previous or next service. They are also used to navigate in menus and interactive screens.

17 These buttons have different functions per menu. They will be guided by on-screen help.

18 🔊? is used to select an audio track and sound mode, or a video track of multifeed programme. 💬 is used to select a subtitle track. 📺 displays teletext.

19 ⏸ pauses live television.

20 UHF is not used in this model.

21 🔇 is not used in this model.

22 M1 displays multi-picture screen. See §5.2.2 for more details.

23 N/P is not used in this model.

24 ⏱ is used to set a sleep timer in 10 minute increments.

NOTE

When using the remote control, point it at the remote sensor on the front panel of the digital receiver.

Chapter 2

Setup

2.1 Unpacking

Before going any further, check that you have received the following items with the digital receiver.

- Remote control
- Two batteries for the remote control (AAA 1.5 V)
- A copy of this user guide

NOTE

Accessories may vary according to your local area.

2.2 Safety precautions

Please read carefully the following safety precautions.

- The mains voltage must range between 90 and 250 volts. Check it before plugging the digital receiver to the wall socket. For the power consumption of the digital receiver, refer to Table 2.1.
- The wall socket should be near the equipment. Do not run an extension lead to the unit.

- The mains plug shall remain readily operable so that it can be removed easily to disconnect the power.
- When placed in a cabinet, make sure there is a minimum space of 10 centimetres around it. For the physical specification of the digital receiver, refer to Table 2.2.
- Protect the power cord from being walked on or pinched. If the cord is damaged, do not use the digital receiver and get the cord replaced.
- Refer all servicing to a qualified service technician.
- To maintain proper ventilation, always leave sufficient space around the digital receiver.

Table 2.1: Power specification

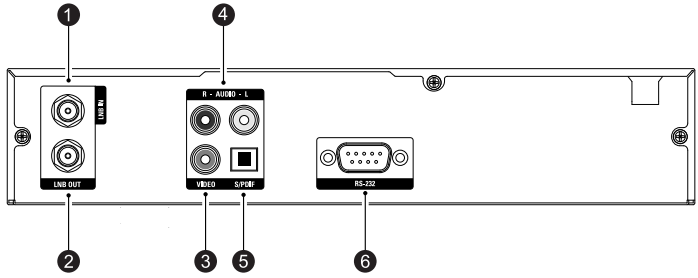
Input voltage	90 to 250 V AC, 50/60 Hz
Power consumption	20 W at maximum in active
	6 W in standby
LNB Power	13 V, 18 V, 500mA Max.

Table 2.2: Physical specifications

Size	260× 46× 190 mm
Weight	1.2 kg
Operating temperature	0 to 45 °C
Storage relative humidity	5 to 90 %

2.3 Rear panel connections

The SBF-5400 has the following connections on the back:



1 LNB IN — Satellite broadcasting signal input socket (Current: Max.500mA with overload protection)

2 LNB OUT — Satellite broadcasting signal output socket through the LNB IN socket for another digital receiver

3 VIDEO — Composite video output socket for the television set (yellow)

4 AUDIO L/R — Stereo audio output socket for the television set or the audio-video receiver (white/red)

5 S/PDIF — Digital audio output socket for the audio-video receiver

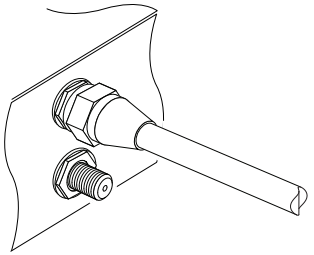
6 RS-232 — Serial port for firmware update and data transfer

Table 2.3: Connectors specifications

VIDEO	Composite video (CVBS) output
AUDIO	Left & right audio output
S/PDIF	Digital audio output
RS-232	115.2 kbps at maximum

2.4 Connecting up your digital receiver

2.4.1 Connecting to the antenna



Whatever sort of connection you have between the digital receiver and the television, you need to connect the digital receiver to the antenna so that it can receive digital television broadcasts. Connect the antenna cable to the LNB IN connector.

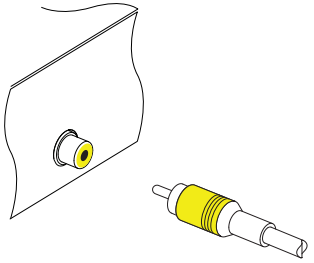
NOTE

Perhaps you are expecting that the satellite antenna could simultaneously catch all frequencies coming from a satellite and send them to the digital receiver. However, the satellite antenna only sends the frequencies that it can catch with the LNB frequency and polarisation specified by the digital receiver. So if you have another digital receiver linked from the LNB OUT connector, you can only use it limitedly. See §3.1 for more details.

2.4.2 Connecting to your television set

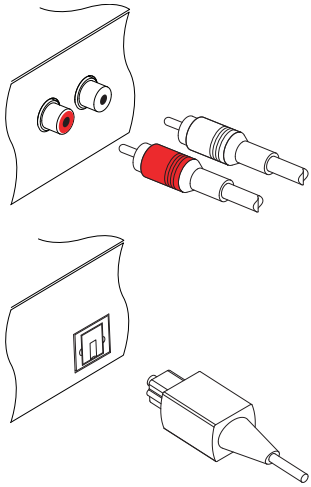
You should configure audio and video settings after connecting up the digital receiver. See §4.2 for a detailed description.

To use the Composite video output



You need to obtain a Composite video cable (RCA cable) to use the Composite video output. Plug one end of the cable into the VIDEO (yellow) socket on the digital receiver, and plug the other end into the matching socket on your television.

To make the audio connection



You need to obtain an audio cable (RCA cable) to link the audio connectors. Plug one ends of the cable into the AUDIO L (white) and AUDIO R (red) sockets on the digital receiver, and plug the other ends into the matching sockets on your television or audio-video receiver.

To enjoy Dolby Digital audio, your television or audio-video receiver must be able to decode Dolby Digital audio, and you need to obtain an S/PDIF cable.

Plug one end of the cable into the S/PDIF socket on the digital receiver, and plug the other end into the matching socket on your audio-video receiver.

2.5 Switching on for the first time

Now that you have your digital receiver connected, you should plug it into a wall socket. Ensure that your television set is turned on and on the correct video channel so that you will be able to see the display from the digital receiver.

Before switching on the digital receiver, you should insert batteries into the remote control. Open the battery compartment by removing the lid, and then insert the batteries observing the polarity, which is marked on the base of the battery compartment.

Press the ⏻ button on the top left corner on the remote control. In a little time, you may see a picture displaying a menu.

If the picture is good, you can skip to §3.1 to search for available television and radio services.

CAUTION

If the digital receiver no longer reacts properly to the remote control commands, the batteries may be flat. Be sure to replace only with 1.5 V AAA size batteries, and observe the following precautions.

- Do not mix different types of batteries, or new and old batteries.
- Do not use rechargeable batteries.
- Do not recharge the old batteries.
- In order to avoid any risk of explosion, observe the polarities indicated inside the battery compartment.
- Do not subject to excessive heat such as the sun and fire.
- If you are not using the remote control for a long period of time, remove the batteries. The manufacturer accepts no liability for the damage resulting from leaking batteries.
- Batteries, including those which contain no heavy metals, may not be disposed with other household wastes. Please dispose of used batteries in an environmentally sound manner. Find out the legal regulations which apply in your area.

Chapter 3

Service Search

After connecting up the digital receiver, you will need to perform a service search.

NOTE

If there is no service stored, you will be not able to access all menus. A SERVICE is another name for a CHANNEL.

3.1 Searching for broadcasting services

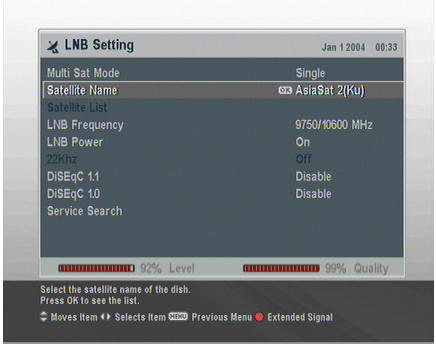
This digital receiver can be operated with both fixed antenna and motorized antenna. You have to configure antenna settings according to your antenna system in the following order:

1. Configure LNB settings. Refer to §3.1.1.
2. Set the position of your desired satellites if you have a motorized antenna. You can control the antenna in DiSEqC 1.2 mode or USALS mode. Refer to §3.1.2 for DiSEqC 1.2, and refer to §3.1.3 for USALS.
3. Perform a service search.

3.1.1 Configuring LNB settings

There are two large frequency bands for satellite broadcasts. One is C band which ranges approximately from 4 to 6 GHz. The other is K_u band which ranges approximately from 12 to 18 GHz.

The LNB (Low Noise Block converter) is used to take a wide band of relatively high frequencies, amplify and convert them to similar signals that is carried at a much lower frequency, which is called Intermediate Frequency (IF). High frequencies from satellites are converted into 950 to 2150 MHz by a LNB.



Select the Installation > LNB Setting menu to configure the LNB settings. You should see a screen like the left figure.

Pressing the OK button on the Satellite Name option displays the satellite list in alphabetic order. Select the satellite toward which your antenna is set to face. Even if you cannot find your desired satellite, you can add your desired satellite to the satellite list. See §3.2 for a detailed description.

The digital receiver has a database of broadcasting satellites and their transponders, containing the following information:

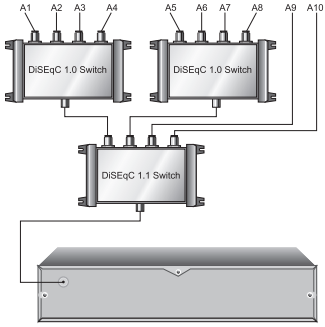
satellite position, frequency range, symbol rate, polarization and LNB frequency corresponding to the frequency range. So you might not have to specify the LNB Frequency option. However, if you have selected the Other entry at the Satellite Name option to specify a satellite that is not in the satellite list, you might have to fill in the correct LNB frequency. The absolute difference between a broadcasting frequency and its LNB frequency must be within 950 to 2150 MHz. For example, if the frequency band of your desired satellite ranges from 3660 to 4118 MHz, you have to set the LNB Frequency option to 5150 MHz.

The LNB has to be supplied with electric power to operate. Set the LNB Power option to On if it does not have any other power supply.

If you use a dual LNB or two antennas which is connected to the 22 kHz tone switch box, set the 22 kHz option to On.

The digital receiver is designed to be compatible with DiSEqC (Digital Satellite Equipment Control) switches. It is possible to connect several antennas to one digital receiver by DiSEqC switches. A DiSEqC 1.0 switch allows switching between up to four satellite sources and a DiSEqc 1.1 switch allows switching between up to 16 satellite sources.

Set the DiSEqC 1.0 option and the DiSEqC 1.1 option according to your antenna configuration.



For example, to select the antenna connected to the A5 input in the left figure, set the DiSEqC 1.1 option to 2 of 4 and the DiSEqC 1.0 option to 1 of 4. If you have a mini DiSEqC 1.0 switch which has only two inputs, you should set the DiSEqC 1.0 option to Mini A instead of 1 of 4.

3.1.2 Configuring DiSEqC 1.2 settings

Your motorized antenna will turn toward your desired satellites horizontally by DiSEqC 1.2.

When you switch to a service, if it is not provided by the current satellite, it will take longer time than usual because the antenna has to turn to its position.

To use the DiSEqC 1.2 protocol, select the Installation > Motorized DiSEqC 1.2 menu. You should see a screen like the left figure. At first you have to set the Motorized DiSEqC 1.2 option to Enable.

To get the correct position of your desired satellite, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Set the DiSEqC Command Mode option to User.
3. Set the Motor Control option to Goto. Then the antenna will turn toward your selected satellite by the position data that the digital receiver has.
4. If the receiving quality is not good, tune the antenna finely with the Movement option. If you set it to 2(E), the antenna will move to the east by two degrees. At this time you had better check the receiving quality of every transponder and choose the best one at the Transponder

(or Frequency) option. It will be helpful to your fine tuning.

5. Finally set the Motor Control option to Store to save the tuned position when the receiving quality is best.

There are more motor control options for installers, but this guide does not describe them. If you are an installer, refer them to the manual about the *STAB* rotor.

3.1.3 Configuring USALS settings

USALS (Universal Satellite Automatic Location System), also known as DiSEqC 1.3, calculates the positions of all available satellites from your location. Compared to DiSEqC 1.2, it is no longer required to manually search and store every satellite position. Just pointing to a known satellite position is enough. This position will act as a central point. The USALS will then calculate positions of visible satellites.

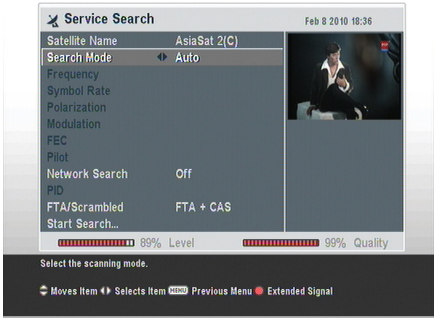
To use the USALS protocol, select the Installation > USALS Setting menu. You should see a screen like the left figure. At first you have to set the Motorized DiSEqC 1.3 option to Enable.

To get every satellite position calculated, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Enter your location to the My Longitude option and the My Latitude option with the ◀, ▶ and numeric buttons.

3. Enter the position of your selected satellite to the Satellite Angle option if it is not correct.
4. Select the Goto the position option, then the antenna will turn toward your selected satellite as calculating its position.
5. If the receiving quality, which is displayed at the bottom right of the screen, is not good, then tune the antenna finely with the Move option. The changed position is automatically saved. At this time you had better check the receiving quality of every transponder and choose the best one at the Transponder (or Frequency) option. It will be helpful to your fine tuning.

3.1.4 Searching for services



To perform a service search, select the Installation > Service Search menu. You should see a screen like the left figure.

There are in general four service search methods:

- searching every service of a satellite,
- searching every service of a transponder,
- searching single service of a transponder,
- searching every service of a SMATV (Satellite Master Antenna Television) system.

Searching every service of a satellite

To search every service of a satellite, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Set the Search Mode option to Auto.
3. If you set the Network Search option to On, the digital receiver will check up the up-to-date channel information while searching services, but it takes a rather longer time.

With the Auto mode, the digital receiver tries to search every service, relying on the transponder data which is stored at the time of manufacture. It thus may happen to fail to search all actually available services since services are more often than not launched, discontinued, or removed into another transponder.

To avoid such missing, you had better set the Search Mode item to Blind. With the Blind mode, the digital receiver tries to search every service, scrutinizing every transponder with every possible combination of transponder elements. It thus may require many minutes or even many hours.

It is possible to search several satellites one after another for services. Set the Multi Sat Mode item in LNB Setting menu to Multi, then the Satellite Name item becomes disabled and the Satellite List item becomes enabled. Pressing the OK button at the Satellite List item pops up the list of satellites. Select satellites you want to search and exit with the EXIT button.

Searching every service of a transponder

To search every service of a transponder, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Set the Search Mode option to Manual.
3. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.
4. Enter the symbol rate of your desired transponder to the Symbol Rate option with the numeric buttons.

5. Set the Polarization option to match to that of your desired transponder.
6. If you set the Network Search option to On, the digital receiver will check up the up-to-date channel information as searching services, but it takes rather longer time.
7. Set the Modulation option to match to that of your desired transponder. If the transponder is of the DVB-S2 standard, you should set this option to DVB-S2 QPSK or DVB-S2 8PSK. Then the FEC option and the Pilot option will become enabled. You also should set these options correctly.

NOTE

You may get transponder information from a satellite magazine or website such as http://www.satbeams.com or http://www.lyngsat.com.

Searching single service of a transponder

To search single service of a transponder, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Set the Search Mode option to Advanced.
3. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.
4. Enter the symbol rate of your desired transponder to the Symbol Rate option with the numeric buttons.
5. Set the Polarization option to match to that of your desired transponder.
6. Set the Modulation option to match to that of your desired transponder. If the transponder is of the DVB-S2 standard, you should set this option to DVB-S2 QPSK or DVB-S2 8PSK. Then the FEC option and the Pilot option

will become enabled. You also should set these options correctly.

7. At the PID option, specify the audio and video packet identification (PID) of your desired service with the numeric buttons.

Searching every service of SMATV system

To search every service of a SMATV system, if the digital receiver is connected to it, take the following steps:

1. Choose your desired satellite at the Satellite Name option.
2. Set the Search Mode option to SMATV.
3. Choose your desired transponder at the Frequency option or enter it with the numeric buttons.
4. Enter the symbol rate of your desired transponder to the Symbol Rate option with the numeric buttons.

You can search pay services as well as free services as follows:

- To search only free services, set the FTA/Scrambled option to FTA only.
- To search both free services and pay services, set it to FTA + CAS.

To start service search, move down to the Start Search item, and press the OK button. The digital receiver will start to search for services and display a list of television and radio services as they are found. It is common for no channels to be found until quite late in the process. When the scan is complete, you will see a message telling you how many services have been found. Press the OK button to save the list.

3.2 Editing the transponder list

You can add, delete or modify satellite or transponder information. Select the Installation > SAT/TP Edit menu. You should see a screen like the left figure.

To add a satellite entry, select the Add Satellite option, then the on-screen keyboard appears. Enter your desired name and save it.

See §6.3 as to how to use the on-screen keyboard.

To change a satellite entry's name, select your desired entry at the Satellite Name option and select the SAT Name Edit option. Then the on-screen keyboard appears. Change the name as you desire and save it.

To delete a satellite entry, select your desired entry at the Satellite Name option and select the Delete Satellite option; then you get asked for confirmation. If you select Yes, it will be deleted.

To add a transponder entry, select your desired entry at the Satellite Name option and select the Add new TP option. Then the transponder information box appears. Enter a frequency and its symbol rate with the numeric buttons, and specify its polarization.

To delete a transponder entry, select your desired entry at the Frequency option and select the Delete TP option; then you get asked for confirmation. If you select Yes, it will be deleted.

3.3 Resetting to factory settings

The digital receiver maintains the following data:

- Satellite list
- Services list
- Favourite list
- Timer list
- Preference settings

You can reset all data of the digital receiver. Select the Installation > Factory Setting menu, and then you get asked for confirmation. With the choice of Yes, the services list, favourite list and timer list will all be cleared, and preference options will be reset to the manufacturer's factory settings.

Chapter 4

Preference Settings

4.1 Language settings

You can select the language in which the menu will be displayed. In addition to that, you can select the language of audio track and of subtitle track. Select the System Setting > Language Setting menu. You should see a screen like the left figure.

4.1.1 Menu language

The digital receiver provides menus in several different languages. Set the Menu Language option to your desired language. Once you select a language, the menu will be immediately displayed in the selected language.

4.1.2 Subtitle language

Set the 1st Subtitle Language option and the 2nd Subtitle Language option to your desired languages. When you watch a programme, if the programme has a subtitle track of the language that is specified for the 1st Subtitle Language, it will be displayed. If the first language is not available but the second language is available, the subtitle of the second language will be displayed. If there is no available language, no subtitle will be displayed.

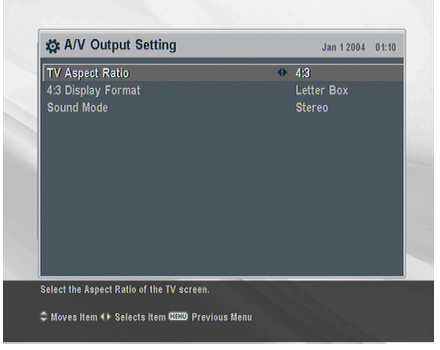
Apart from this setting, you can select a subtitle track with the button. See §5.2.6 for a detailed description.

4.1.3 Audio language

Set the 1st Audio Language option and the 2nd Audio Language option to your desired languages. When you watch a programme, if the programme has an audio track of the language that is specified for the 1st Audio Language, it will be output. If the first language is not available but the second language is, the audio of the second language will be output.

Apart from this setting, you can select an audio track with the button. See §5.2.5 for a detailed description.

4.2 Video and audio settings



You have to configure the video and audio settings appropriately for your television set and other devices. Select the System Setting > A/V Output Setting menu. You should see a screen like the left figure.

4.2.1 Television aspect ratio

If you have a wide-screen television, set the TV Aspect Ratio option to 16:9.

You can enjoy both wide-screen programmes and normal-screen programmes with your wide-screen television as the above figures show. To watch normal-screen programmes in full screen like the left figure, set the 16:9 Display Format option to Full. Normal-screen pictures then will be inflated to fit to the width of the wide screen. Otherwise, to watch them in the original ratio like the right figure, set it to Center. If you have a normal-screen television, set the TV Aspect Ratio option to 4:3.

You cannot fully enjoy wide-screen programmes with your normal-screen television as the above figures show. The left figure shows a normal picture displayed in the normal screen. To watch wide-screen programmes in the shape like the centre figure, set the 4:3 Display Format option to Letter Box. Wide-screen pictures then will be reduced to fit to the width of the normal screen. Otherwise, to watch them in the shape like the right figure, set it to Center extract. Then wide-screen pictures will be cut out on the left and right sides equally to fit to the

width of the normal screen.

4.2.2 Audio mode

Basically, there are two audio sources as you can find two audio sockets on the back panel of the digital receiver. You can enjoy only one source or both of them in either stereo or mono. Set the Sound Mode option as you desire.

Apart from this setting, you can change the sound mode with the (?) button. See §5.2.5 for a detailed description.

4.3 Local time setting

You should set your local time for timer events. If you do not set the local time correctly, the programme time table provided by the programme guide may be distrustful. For the programme guide, refer to §5.3.

Select the System Setting > Time Setting menu. You should see a screen like the left figure. You can set the clock manually or use the time signal, Greenwich Mean Time (GMT), carried as part of the digital television broadcast. To use Greenwich Mean Time, take the following steps:

1. Set the Mode option to Auto, then the Time Offset option becomes enabled.
2. Set the Time Offset option to the time difference between your time zone and GMT referring to Table 4.1.
3. To get Greenwich mean time, set the GMT Collection option to one among the followings:

   Normal from all transponders

CAS Only from transponders of pay services
User Select from transponders specified by you

If you set it to User Select, then the Satellite option and the Transponder option become enabled. Select your desired satellite and transponders at those options. With the above settings, the digital receiver will scan all specified transponders one by one until it gets the Greenwich Mean Time.

4. Make sure that your local time is correctly displayed on the Local Time item.

To set the local time manually, set the Mode option to Manual and enter your local time to the Local Time option with the numeric buttons. The time format is *day/month/year 24-hour:minute*.

Table 4.1: Time offset table

Time offset	City
GMT − 12:00	Eniwetok, Kwajalein
GMT − 11:00	Midway Island, Samoa
GMT − 10:00	Hawaii
GMT − 09:00	Alaska
GMT − 08:00	Pacific Time US, Canada
GMT − 07:00	Mountain Time US, Canada
GMT − 06:00	Central Time US, Canada, Mexico City
GMT − 05:00	Eastern Time US, Canada, Bogota, Lima
GMT − 04:00	Atlantic Time Canada, La Paz, Dominican Republic
GMT − 03:30	Newfoundland
GMT − 03:00	Brazil, Georgetown, Buenos Aries
GMT − 02:00	Mid-Atlantic
GMT − 01:00	Azores, Cape Verde Islands
GMT	London, Lisbon, Casablanca
GMT + 1:00	Paris, Brussels, Copenhagen, Madrid
GMT + 2:00	South Africa, Kaliningrad
GMT + 3:00	Baghdad, Riyadh, Moscow, St. Petersburg
GMT + 3:30	Tehran
GMT + 4:00	Abu Dhabi, Muscat, Baku, Tbilisi
GMT + 4:30	Kabul
GMT + 5:00	Ekaterinburg, Islamabad, Karachi, Tashkent
GMT + 5:30	Bombay, Calcutta, Madras, New Delhi
GMT + 6:00	Almaty, Dhaka, Colombo
GMT + 7:00	Bangkok, Hanoi, Jakarta
GMT + 8:00	Beijing, Perth, Singapore, Hong Kong
GMT + 9:00	Tokyo, Seoul, Osaka, Sapporo, Yakutsk
GMT + 9:30	Adelaide, Darwin
GMT + 10:00	Eastern Australia, Guam, Vladivostok
GMT + 11:00	Magadan, Solomon Islands, New Caledonia
GMT + 12:00	Fiji, Auckland, Wellington, Kamchatka

4.4 Parental control

In general, television programmes are classified according to the level of violence, nudity and language of their content. When you are watching a programme, you can check its programme classification on the information box. For the information box, see §5.2.4. You can prevent your children from watching specific programmes by specifying a maximum permissible level.

Select the System Setting > Parental Control menu. You should see a screen like the left figure, and you will be asked your Personal Identification Number (PIN). The number is initially set to '0000' as default.

If you wish to block programmes for viewers aged 15 or above, set the Censorship option to 15 (age). Setting it to No block blocks no programme; on the other hand, setting it to Total block blocks every programme.

NOTE

If a programme has no rating information, your censorship setting will not take effect.

If anyone is trying to watch a programme that is of or above the censorship setting, the person has to enter the personal identification number to override. To change the number, select the Change PIN Code menu, then a box pops up, asking a new PIN. Enter a desired number twice for confirmation.

You can also restrict uses of some menus. Selecting the Access Control menu displays a list of menus that you can lock. If the Time Setting item is set to Locked, you have to enter the PIN when accessing the Time Setting menu. If you enter a wrong number, you cannot use the menu. To release a locked item, set it to Unlocked.

4.5 Adjusting the On-Screen Display

You can adjust the transparency level of the On-Screen Display (OSD). Select the System Setting menu and set the OSD

Transparency option as you desire. Its available range is 0 to 50 percent.

You can adjust the display time of the information box. For the information box, see §5.2.4. To adjust its display time, select the System Setting menu and set the Info Box Display Time option as you desire. Its available range is 1 to 30 seconds. If you set this option to No Info Box, the information box will not be displayed when you switch services. However, pressing the button will display the information box. If you set this option to Never Hide, the information box will always be displayed.

In addition, you can raise or lower the position of the information box. Select the System Setting menu and set the Info Box Position option as you desire. Its available range is -10 to $+3$ lines. The higher you set the option, the lower the information box will be positioned.

Chapter 5

Every Day Use

5.1 Volume control

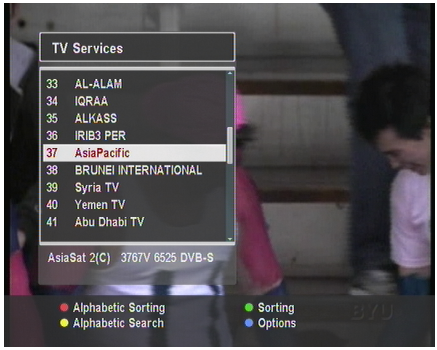
Use the V− and V+ buttons to alter the volume to a comfortable level. You may need to adjust the volume on your television set too. To temporarily switch off the sound, press the button. Press it again to restore the sound to previous level.

5.2 Watching television

To change services, press the P− or P+ button. Pressing the button switches to the previously viewed service. In addition, you can switch to your desired service by entering its service number with the numeric buttons. You can also select a service to watch in the services list.

5.2.1 The services list

To view the services list, press the OK button.



On the services list, you can see the service information as follows:

- Service number and name
- Transmitting satellite
- Multiplex information

A dollar sign (**$**) may be marked on some entries, indicating pay service. You cannot watch pay services with this receiver.

To select a desired service, put the highlight bar on its entry with the ▲ or ▼ button and press the OK button, then the selected service will be presented.

Pressing the ◀ or ▶ button skips over 10 entries up or down. Entering a service number with the numeric buttons puts the highlight bar on its entry.

You can switch between the television services list and the radio services list by pressing the button.

you can browse as a group the services that have a same initial. Press the F1 button at the services list screen, then you should see a screen like the left figure.

In the box on the left side, select a desired initial group by putting the highlight bar on its entry, then all the services having the selected initial will be displayed in the box on the

right side. Move over to the right box with the ▶ button, and then select a service you want to view by putting the highlight bar on its entry, then the selected service will be presented. Pressing the F3 button performs an alphabetic browse. For instance, when the highlight bar is on an entry of which initial is B, pressing the F3 button puts the highlight bar on the first entry of which initial is C.

Pressing the SAT button displays the satellite list. Once you select a desired satellite, only services provided by the selected satellite are listed.

5.2.2 Watching on multi-picture screens

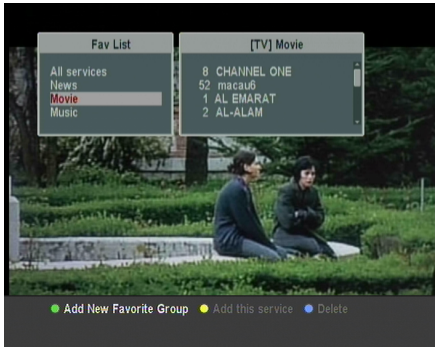
Pressing the M1 button on the services list displays the multi-picture options; you can choose one among five layouts: 4, 8, 9, 12 or 16 windows. Select a desired layout by pressing the OK button. Refer to §5.2.1 for the service list screen.

If you choose the 12 Windows, the current service will be presented with still images of six services prior and posterior to it.

It takes a little time to display all pictures of services. To watch a desired service among them, move the highlight frame on it and press the OK button.

5.2.3 The favourite service lists

You can select a service to watch on a favourite list as well as on the services list.



To display the favourite lists, press the FAV button. You should see a screen like the left figure. As you move the highlight bar up or down on the favourite group list at the left box, favourite services belonging to the highlighted group are listed on the right box.

As to how to edit the favourite lists, refer to §6.2.

To select a favourite service, put the hightlight bar on a desired group and press the ▶ button; a highlight bar appears on its favourite services list. Once you select a desired service with the OK button, it will be presented. Otherwise, to select other group, press the ◀ button.

After you have selected a favourite service, if you then switch to another service using the ▲ or ▼ button, it will be also another favourite service of the selected group. The digital receiver will remind you what group you have selected by displaying its name at the top right of the screen whenever you switch services. If you wish to get out of the current group, select the All services group on the favourite group list.

Besides that, you can add or delete a favourite group or service. To add a service you are currently watching into a favourite group, put the highlight bar on a desired group and press the F3 button. To create a new group, press the F2 button; then the on-screen keyboard appears. Enter your desired name and save it. See §6.3 as to how to use the on-screen keyboard. To delete a group or a service, press the F4 button, then you get asked for confirmation. With the choice of Yes, it will be deleted.

5.2.4 Viewing programme information

Pressing the button displays the information box, on which you can see all of the following:

- Service number and name
- Transmitting satellite
- Transponder information
- Signal level and quality
- Programme name
- Programme classification sign
- Programme summary
- Broadcasting time
- Current time

In addition, you might see the following symbols:

- Subtitle symbol ( ) if subtitle tracks are provided on the current programme.
- Teletext symbol ( ) if teletext pages are provided on the current service.
- Dolby Digital symbol (D) if a Dolby Digital audio track is provided on the current programme.
- Lock symbol ( ) if the current service is locked.
- Dollar symbol (**$**) if the current service is a pay service.

Pressing the button once more displays detailed information about the current programme. To hide the information box, press the EXIT button.

5.2.5 Selecting audio tracks

Some programmes are provided with audio tracks in one or more languages. Pressing the button displays available audio tracks. Once you select an audio track, that track will be heard. In addition, you can enjoy audio tracks in four sound modes: Stereo, Mono, Left or Right.

5.2.6 Selecting subtitle tracks

Some programmes are provided with subtitle tracks in one or more languages. If the current programme provides subtitle tracks, the subtitle symbol ([_]) will be marked on the information box. Pressing the (▭) button displays available subtitle tracks. Once you select a subtitle track, it will be displayed.

5.2.7 Viewing teletext

On some services, such information as weather reports, news or stock quotations is provided by means of teletext. If the current service provides teletext, the teletext symbol ([≡]) will be displayed on the information box. Press the (▤) button to view teletext pages.

Select a page to view by entering its page number with the numeric buttons. You can zoom into a teletext page with the F3 button, and adjust its transparency level with the F4 button. To clear the teletext screen, press the EXIT button.

5.3 Viewing electronic programme guide

The Electronic Programme Guide (EPG) shows the current and scheduled programmes that are or will be available on each service with a short summary for each programme.

Pressing the EPG button displays the electronic programme guide, on which you can see the following:

- Scheduled programmes
- programme summary
- Broadcasting date
- Broadcasting time

To see detailed information of a desired programme, put the highlight bar on the programme with the ▼ or ▲ button and press the button. To switch to another service, press the ◀ or ▶ button.

You can travel over previous days with the F2 button, and can travel over next days with the F3 button.

To see the programme guide for radio broadcasts, press the button. To switch it back, press the button again.

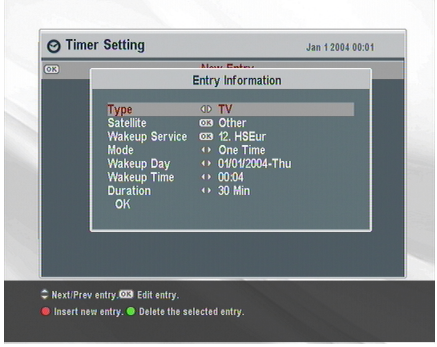
Pressing the F1 button will rearrange the form, swapping the columns and rows. To switch it back, press the F1 button again.

You can make a timer event on the electronic programme guide as follows:

1. Select a service you want.
2. Press the EPG button to display its programme guide.
3. Select a programme you want with the OK button, then **P** is marked up on the entry. At the same time, a timer event with the selected programme will be made in the timer list. Refer to §5.4 for the timer list.
4. To remove the marking, press the OK button once again.

5.4 Making timer events

You can make your desired service to be presented at a specific time. Even if the digital receiver is in standby mode, it will switch into active mode at a specified time. And it will switch back into standby mode again after the specified duration.



Select the Timer Setting menu, then the timer list will be displayed. To add a new timer event, press the F1 button, then an option box pops up. Take the following steps:

1. If you want a radio programme, set the Type option to Radio; otherwise, set it to TV.
2. Set the Satellite option to the satellite which transmits the service you want. Pressing the OK button on this option displays a satellite list, from which you can select your desired satellite.
3. Set the Wakeup Service option to the service that provides the programme you want. Pressing the OK button on this option makes a services list pop up, in which you can select your desired service.
4. There are five timer modes:

   One Time means literally 'one time.'
   Every Day means literally 'every day.'
   Every Weekend means 'Saturday and Sunday every week.'
   Weekly means 'one day every week.'
   Every Weekday means 'from Monday to Friday every week.'

   If your favourite programme is on the air at weekends and you wish to watch every episode of the programme, set the Mode option to Every Weekend.
5. Set the Wakeup Day option to a desired date, on which the digital receiver will turn on. The date format is *day/month/year—day of the week*.

Set the Wakeup Time option to a desired time, at which the digital receiver will turn on. The time format is *hour:minute*.

6. Set the Duration option to a desired time, in which the digital receiver will turn off.
7. To save with the above settings, select the OK item

You can also edit or delete timer events in the timer list. To edit a timer entry, put the highlight bar on the entry you want and press [OK] button, then pops up the option box in which you can change its settings in the same manner as making a new one.

To delete a timer event, put the highlight bar on the entry you want to remove and press the [F2] button, then you get asked for confirmation. With the choice of Yes, it will be deleted.

If you've made timer events from the electronic programme guide, they will be also displayed in the timer list. In that case, you can edit or delete them in the same manner described above.

NOTE

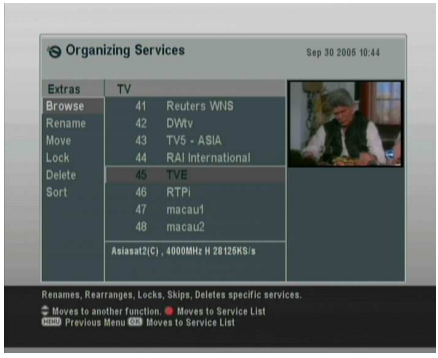
Do not operate the digital receiver while it is working on a timer event. If you press any key on the remote control or on the front panel, it will not turn off automatically even after the timer event is complete.

Chapter 6

Organising Services

6.1 Editing the services list

You would have got the services list after service search. You can rename, move, lock or delete service entries on the services list.



Select the Organizing Svc/Fav > Organizing Services menu. You should see a screen like the left figure. There are editing options on the left column and service entries on the right column.

Once you put the highlight bar on a desired option on the left column and press the OK button, you can select a desired service to edit on the right column. To go over to the other column, press the F1 button.

To edit the radio services list, press the button, then ra-

dio service entries will be listed on the right column. To switch back to the television services list, press it again.

To change the name of a service, select the Rename and select a desired service; then the on-screen keyboard appears. See §6.3 as to how to use the on-screen keyboard.

Unlike analogue broadcasts, each service does not have a proper service number in digital broadcasts. Service numbers are just assigned to services in the order that they were found in service search. So you can reassign a service number by moving a service entry. To move a service entry, select the Move option and select a desired service; then the selected service becomes darker. As you move it up or down, it gets renumbered according to the position. Press the OK button to fix it.

You can lock some services to prevent your children from watching them. To lock a service, select the Lock option and select a desired service; then the selected service gets marked with a lock symbol (🔒) on it. If anyone tries to watch a locked service, the person has to enter the personal identification number that is set to the Change PIN Code option. See §4.4 for this option. Pressing the OK button on a locked service entry turns it back to be unlocked.

To delete a service, select the Delete option and select a desired service with the OK button, and then press the EXIT button; you get asked for confirmation. If you select Yes, the selected service will be deleted. If you want to undo the deleted service, there is nothing you can do but perform a service search again.

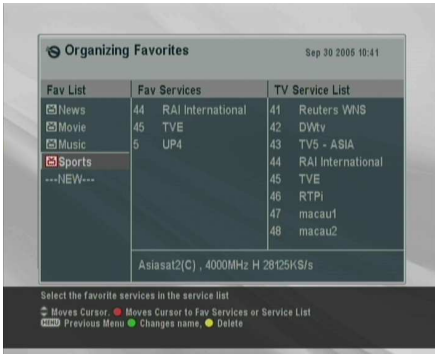
Once you select the Sort option on the left column, sorting options are displayed as follows:

Default by service number
Alphabetic by service name
Satellite by satellite
FTA–CAS from free services to pay services
CAS–FTA from pay services to free services

Fav–NoFav from favourite services to unfavourite services
Provider by broadcaster
Transponder by transponder

6.2 Editing the favourite lists

You can make your own favourite service lists. In fact, you can define multiple favourite service lists, each being a 'group' of chosen services.



Select the Organizing Svc/Fav > Organizing Favorites menu. You should see a screen like the left figure. There are three columns:

- Group name (left)
- Favourites list (centre)
- Services list (right)

The services list contains all available services, whereas the favourites list contains only chosen services that have been added to the highlighted group. As you move the highlight bar up or down on the group list, favourite services belonging to the highlighted group get shown in the favourites list.

You can add up to 30 groups. To add a new group, select the NEW item in the group list, then the on-screen keyboard appears. See §6.3 as to how to use the on-screen keyboard.

To rename a group, put the highlight bar on the group entry you want and press the F2 button, then the on-screen keyboard likewise appears.

To delete a group, put the highlight bar on the group entry you want and press the F3 button, then a message box appears, asking you for confirmation. With the choice of Yes, it will be deleted.

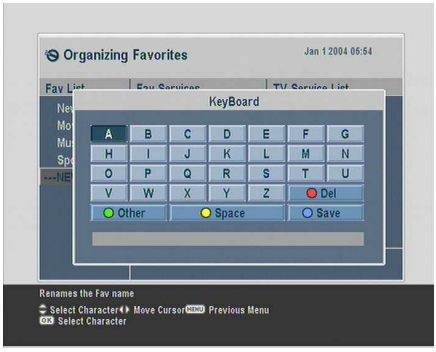
You can add a favourite service to a group by taking the following steps:

1. Put the highlight bar on a desired group entry in the group list and press the OK button to select it. The highlight bar then moves to the services list.
2. To add a service to the selected group, put the highlight bar on a desired service entry and press the OK button. The selected service entry gets added to the favourite list. Repeat this step to add more entries.
3. Press the F1 button, and the highlight bar gets moved to the favourite list. You can delete a favourite entry with the OK button.
4. To select another group, press the F1 button again, then the highlight bar gets moved to each column.

Furthermore, you can rearrange a group's favourites by moving a favourite entry. To move a favourite entry, put the highlight bar on the favourite entry you want and press the F2 button. Press the ◀ and ▶ buttons or ▲ and ▼ buttons to move it to a desired place and press the OK button. To add radio services, press the TV/R button, then radio service entries get listed in the services list. To recall the television services list after adding radio services, press the TV/R button again.

As to how to use the favourite service lists you organised, refer to §5.2.3.

6.3 How to use on-screen keyboard


Organizing Favorites
Jan 1 2004 05:54
KeyBoard
A B C D E F G
H I J K L M N
O P Q R S T U
V W X Y Z Del
Other Space Save
Renames the Fav name
Select Character Move Cursor MENU Previous Menu
OK Select Character

You can move the highlight key horizontally with the ◀ and ▶ buttons and vertically with the ▲ and ▼ buttons. Pressing the OK button on a key enters its letter in the input line. To type a space, select the Space key. To type lower case letters or numerals, select the Other key.

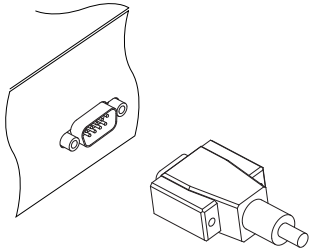
To delete a letter, put the cursor to the right of the desired letter on the input line and then select the Del key. You must select the Save key to store the name; otherwise if you press the EXIT button, the name will not be stored.

6.4 Transferring receiver data

The digital receiver retains the following data:

- Satellite and transponder data
- Services list
- Favourite lists
- Preference settings

It is possible to transfer the receiver data from the digital receiver to another SBF-5400 digital receiver by connecting them with an RS-232 cable. To have the receiver data transferred, take the following steps:



1. Plug one end of an RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on the other digital receiver.
2. Turn on the source digital receiver.
3. Select the Installation > Transfer Firmware > Transfer Data to Other IRD menu, then you get asked for confirmation; select Yes.
4. To start the data transfer, turn on the target digital receiver.
5. A progress bar appears showing the progress of the data transfer.
6. Restart the target digital receiver when the data transfer is complete.

Chapter 7

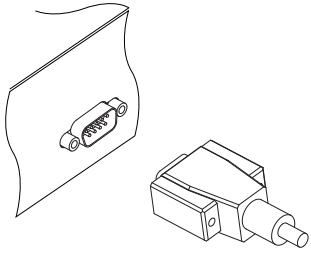
Firmware Update

The digital receiver has a stable and convenient firmware to use. However, once in a while a new firmware may be released to improve the digital receiver. You can get the latest firmware and the firmware update tool, which runs on most versions of Windows, from the Topfield website, http://www.i-topfield.com.

7.1 From your computer via RS-232 port

It is possible to transfer a new firmware to the digital receiver from your computer by connecting them with an RS-232 cable. You need *TFD-Down*, a firmware transfer utility for this, which is available from the website, http://www.i-topfield.com.

To update the firmware by this method, take the following steps:



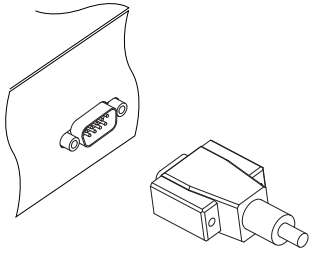
1. Download a new firmware applicable to your digital receiver from the Topfield website.
2. Turn off the digital receiver.
3. Plug one end of an RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on your computer.
4. Run *TFD-Down*.

The instructions on how to use *TFD-Down* are as follows:

1. Press the Find button to select the new firmware file.
2. Press the download button, and then turn on the digital receiver to start the file transfer.
3. A countdown will be displayed on screen.
4. Restart the digital receiver when the file transfer is complete.

7.2 From another digital receiver via RS-232 port

It is possible to transfer the firmware from the digital receiver to another same digital receiver by connecting them with an RS-232 cable. To update the firmware with this method, take the following steps:



1. Turn off the target digital receiver.
2. Plug one end of an RS-232 cable (9 pin D-sub cable) into the RS-232 port on the digital receiver, and the other end into the matching port on the other digital receiver.
3. Turn on the source digital receiver if not already on.
4. Select the Installation > Transfer Firmware > Transfer Firmware to Other IRD menu, then you get asked for confirmation; select Yes.
5. Turn on the target digital receiver to start the firmware transfer.
6. A progress bar appears showing the progress of the firmware transfer.
7. Restart the target digital receiver when the firmware transfer is complete.

7.3 Over the air

You can get a new firmware over the air. Select the Firmware Upgrade menu. You should see a screen like the left figure.

Satellite	*Astra* (19.2° E)
Frequency	12603 MHz
Symbol Rate	22000 KS/s
Polarisation	Horizontal
PID	347

On the left table is presented the transponder information appointed by the manufacturer, Topfield, for firmware update.

This transponder information can be changed. You can get the information from the website, http://www.i-topfield.com. Selecting the Start command starts firmware update.

Correct disposal of this product

This marking shown on the product or its literature indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product or their local government office for details of where and how they can dispose this product for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

At any time during the life of a product Topfield Co., Ltd. may change or modify the hardware or software on any product to introduce new features or improve the functionality of the product.

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English version

http://www.i-topfield.com

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